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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PARDES HANNA, 37111				
ISRAEL				
EXAMINER				
STOUT, MICHAEL C				
ART UNIT		PAPER NUMBER		
3736				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/595,493

Applicant(s)

GUR ET AL.

Examiner

MICHAEL C. STOUT

Art Unit

3736

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-859)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date ____
- 6) ☐ Other: ____
- 7) ☐ Notice of Informal Patent Application
- 8) ☐ Paper No(s)/Mail Date 1/20/2011

DETAILED ACTION

This detailed action is in regards to United States Patent Application 10/595493 filed 8/17/2009.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldon (US 2002/0173712 A1) in view of Eide (US 7,559,898 B2).

Regarding claim 1, Feldon discloses a method for measuring internal pressure of a body comprising:

aligning a longitudinal axis of a light projecting and collecting device with said body (aligning the applanation surface 11 with the eye, see Figure 2a); detecting changes of intensity of light reflected from a convex sector of a surface of said body and delivered by total internal reflection in a light guide (the applanator 11 comprises a fiber optic array, see [0024], [0027], wherein light and directs and captures reflected light[0028 which is detected by a sensor[0045]), and wherein said changes are related to a distortion induced by a force (see abstract, [0021] and [0022]), and matching a time-related feature associated with said changes of said light intensity measured with a given pressure value, wherein said time related-feature is any of the following: a time length of said pneumatic pulse, a time interval in which said changes of said light intensity measured are detected, a slope of said changes of said light intensity measured (See [0046] and [0047]).

Feldon is silent regarding the method wherein the force applied to distort the eye is induced by a pneumatic pulse.

Eide teaches an application pressure monitor wherein force is applied by a pneumatic pulse which controls the force by which the sensor is applied to the eye, see column 38, lines 5-50, see summary of invention.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the method taught by Feldon to include a pneumatic pulse as taught by Eide in order to apply the sensor against the eye in a and reproducible manner controlled manner, see column 38 and summary of invention.

Regarding claim 2, Feldon further teaches the method for measuring internal pressure of a body as in claim 1, wherein said time-related feature is a slope of said changes of said light intensity measured (see claim 1 above, [0046]-[0047]).

Regarding claim 3, Feldon further teaches the method for measuring internal pressure of a body as in claim 1, wherein said body is an eye (see [0034], and claims).

Regarding claim 4, Feldon further teaches the method for measuring internal pressure of a body as in claim 1, and wherein said light projecting and collecting device is a unitary light projecting and collecting device tube (LPCT) (a fused bundle of fiberoptics array, see [0024]).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feldon (US 2002/0173712 A1) in view of Eide (US 7,559,898 B2) and Abreu (US 6,423,001 B1).

Regarding claim 5, Feldon in view of Eide teaches the method of claim 1 as set forth above. Feldon is silent regarding the method, wherein said aligning is carried out using a user observed reticle.

Abreu teaches a method of measuring pressure in the eye wherein aligning the sensor device is carried out using a user observed reticle, see (see column 9, lines 1-12, and column 40, lines 25—55).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the method taught by Feldon to include a sighting reticle as taught by Abreu in order to properly align the sensor with the eye, see column 40, lines 25—55.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman et al. (US 3,585,849) in view of Massie (US 5,86,742).

Regarding claim 6, Feldon discloses a device for measuring internal pressure of a deformable body wherein changes in the reflectance of a sector of said body are measured in correlation with a distortion of said body effected by a pneumatic pulse, and wherein said sector located within a convex surface of said body, said device comprising:

a first tube having a substantially thick wall pointing at said sector wherein the proximal face of said wall is adapted to receive light reflected from said body (orifice tube 8 recites an air pulse and is formed with lens members 16);

a second tube for conveying pneumatic pulse to said deformable body (as best shown in Figure 1 the piston 10 resides in a tubular cylinder which contains the piston and directs air to the chamber 6, to convey the pulse to the tube 8, one of ordinary skill in the art would recognize that the beam splitter would at least partially deflect incoming light);

a light detector (42)

a reflector used for both deflecting a beam of light of a light source through the lumen of said first tube to said body and for blocking reflected light from said body (a beam splitter 18 deflects light from a source 24 to the eye).

Feldon teaches the device wherein the first tube comprises optics for passing light and air pass through a first tube structure to the eye.

Feldon is silent regarding the device wherein the detector recites light from the optics wall and wherein a reflector used for both deflecting a beam of light of a light source through the lumen of said first tube to said body and for blocking reflected light from said body.

Massie teaches a eye monitoring system wherein the detector 21 receiving light passing through the wall of the optics system, (19), see Figure 1a by a reflector (beam

splitter), which deflects light from a source, (optical means 21 emitting light beams 18, see columns 5 and 6, and blocks reflected light from the body, (some of the light passes through the beam splitter to the ocular, and some of the light is blocked from passing to the ocular and is deflected to the sensor means 21, see columns 5 and 6 and Figure 1a).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the device taught by Feldon to include placing the sensor and emitter together adjacent to the beam splitter as taught by Massie in order to monitor light reflected from the eye in response to a stimulus, by substituting one suitable sensor position for another, the combination teaching the features as claimed in claim 6.

Regarding claim 7, Feldon further discloses the device of claim 5, wherein said deformable body is an eye (see Abstract).

Regarding claim 8, Feldon further discloses the device of claim 6, comprising in addition a reticle for projecting an image thereof on said eye (reticule 20).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman et al. (US 3,585,849) in view of Massie (US 5,86,742).and Feldon (US 2002/0173712 A1).

Regarding claim 9, Goldman in view of Massie teaches the device of claim 6 above. Goldman further teaches the device wherein said light detector is connected to a control unit which also compares the curve of changing reflection of light as correlated

with a transient deformation of the eye with stored given internal pressure values (Goldman teaches the device wherein a readout instrument 44 processes the sensor signal and outputs the change in amplitude over time which is correlated to data to determine IOP, see columns 2 and 3).

Goldman fails to expressly disclose monitoring changes in slope (amplitude over time).

Feldman teaches monitoring changes in slope to determine IOP (See [0046] and [0047]).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the device taught by Goldman to include monitoring changes in slope as taught by Feldman in order to calculate IOP using a linear relationship between the slopes and IOP.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman et al. (US 3,585,849) in view of Massie (US 5,86,742).and Fresco (US 6,706,001 B2).

Regarding claim 10, Goldman in view of Massie teaches the device of claim 6 above.

Goldman is silent regarding the device of wherein a mounting is included for securing said the device to the head of the user.

Fresco teaches an IOP monitoring device comprising a mounting is included for securing said the device to the head of the user (adjustable straps 188 in order to place the tonometer over the eye, see Figure 1, which allow the device to be secured to the patients head, see column 14.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the device taught by Goldman to include straps as taught by Fresco in order to secure the device to a persons head providing a wearable device which moves with the head during movement.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 form for references cited but not relied upon for rejection of the claimed subject matter.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL C. STOUT whose telephone number is (571)270-5045. The examiner can normally be reached on M-F 7:30-5:00 Alternate (Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C. S./
Examiner, Art Unit 3736

/Max Hindenburg/
Supervisory Patent Examiner, Art Unit 3736